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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/588,495

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Frank Forster

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EXAMINER

HENSON, MISCHITA L

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/588,495	Applicant(s) FORSTER, FRANK	
	Examiner Mi'schita' Henson	Art Unit 2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>August 4, 2006, November 6, 2006</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is responsive to the amendment filed on August 4, 2006. Claims 1 and 3-4 are amended. Claims 7-9 are new. Claims 1-9 are pending.

Specification

1. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

The abstract of the disclosure is objected to because it contains legal phraseology "said". Correction is required. See MPEP § 608.01(b).

2. The disclosure is objected to because of the following informalities: it lacks proper formatting and/or title heading for the content of the specification.

Appropriate correction is required.

Content of Specification

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.
- (f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
 - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
 - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."

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- (g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual

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Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).

- (l) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

Claim Objections

3. Claims 1 and 5 are objected to because of the following informalities:

Claim 1 line 2 recites “an object (2) with”, Examiner suggests --an object (s) comprising--, line 4 recites “data,”, Examiner suggests --data;--. line 6 recites “the object (2), and with”, Examiner suggests --the object (2); and--

Claim 5 line 2 recites “object (2) with the following steps”, Examiner suggests --object(2) comprising:--. Appropriate correction is required.

4. Claim 2 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 2 lines 2-3 recite the limitation “the pattern (4) contains redundantly-encoded projection data” which is found in claim 1, the claim from which it depends, in lines 15-16 which recites “and the pattern (4) contains redundant encoded projection data”. Therefore, these limitations are interpreted to be the same.

5. Claim 5 is objected to because of the following informalities:

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the language of the claim is non-standard and awkward. The claim is not written to recite positive and active steps. For example, --projecting of a pattern-- instead of "Projection of a pattern". See 37 CFR 1.75 and MPEP 608.01(i)-(p).

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 5-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Geng in US Patent 6,028,672.

Regarding claim 5, Geng teaches:

Method for determining spatial co-ordinates of an object (2) (see three-dimensional surface profile measurement method, Abstract) with the following steps:

- Projection of a pattern (4) with known projection data onto an object (2) (see a projected rainbow color pattern, column 3 lines 44-47; see also see spatially varying color pattern, column 4 lines 52-53 and Fig. 9; see also spatially varying wavelength illumination, column 3 lines 34-36 and column 9 lines 17-18);

- Creation of an object image (8) with the aid of a camera (6) (see captured images, column 4 lines 30-55, column 5 lines 24-28; see also "...a pair of CCD cameras...The images, which contain both intensity and color...", column 2 lines 17-25, column 6 lines 59-61 and Fig. 1) ; and

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- Determination of the spatial co-ordinates from the known projection data (see three-dimensional surface profile measurement method, Abstract) in a data processing unit (7) (see host computer, column 4 lines 25-26, column 5 lines 66-67 and Fig. 1), characterized in that, with the aid of a further camera (6) a further object image (9) (see "...a pair of CCD cameras...The images, which contain both intensity and color...", column 2 lines 17-25, column 6 lines 59-61 and Fig. 1) is recorded and that, if the spatial co-ordinates are determined incorrectly, additional spatial co-ordinates of the object (2) are determined on the basis of the projection data and one of the pattern images (8, 9) by searching for corresponding image points (S_l , S_r) in the object images (8, 9) (see Two Complementary Stereo Matching Schemes, column 7 line 15 - column 8 line 48) and a subsequent triangulation (see triangulation algorithm/principle, Abstract, column 3 lines 40-41 and Fig. 1; see also active triangulation, column 2 lines 9-50).

Regarding claim 6, Geng teaches the limitations of claim 5 as indicated above. Further, Geng teaches:

Method as claimed in claim 5, characterized in that, corresponding pixels (S_l , S_r) are searched for along epipolar lines (16, 17) (see epipolar line, column 8 lines 20-48 and Fig. 5).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 1-3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geng in US Patent 6,028,672, in view of Keating et al. 2002/0122566.

Regarding claim 1, Geng teaches:

Device for determining spatial co-ordinates of an object (2) with:

a projector (3) which projects onto the object (2) (see light projector, column 4 lines 13-16, column 6 lines 42-54, Figs. 1-2 and 9-10; see object, column 4 lines 18-20 and Figs. 1-2 and 9-10) a pattern (4) with known projection data (see spatially varying color pattern, column 4 lines 52-53 and Fig. 9; see also spatially varying wavelength illumination, column 3 lines 34-36 and column 9 lines 17-18),

a camera (6) which creates an object image (8) of the pattern (4) projected onto the object (2) (see "...a pair of CCD cameras...The images, which contain both intensity and color...", column 2 lines 17-25, column 6 lines 59-61 and Fig. 1), and with

a data processing unit (7) (see host computer, column 4 lines 25-26, column 5 lines 66-67 and Fig. 1) connected downstream from the camera (6), which determines spatial co-ordinates of the object (2) from the object image (see three-dimensional surface profile measurement, Abstract) (8) and the known projection data, characterized in that, at least one further camera (6) (see "...a pair of CCD cameras...The images, which contain both intensity and color...", column 2 lines 17-25, column 6 lines 59-61 and Fig. 1) creates a further object image (9) and the data processing unit (7) determines additional spatial co-ordinates of the object (2) from the object images (8, 9) by means of a triangulation method (see triangulation algorithm/principle, Abstract, column 3 lines 40-41 and Fig. 1; see also active triangulation, column 2 lines 9-50) and

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the pattern (4) contains redundant encoded projection data (see “simple and elegant way to encode”, column 4 lines 52-56; see also encodes, column 7 lines 34-38).

Geng differs from the claimed invention in that it does not explicitly teach the encoded projection data to contain redundant encoded projection data. Keating et al. teaches an apparatus for embedding data in an information signal comprising an encoding processor (Abstract, [0001] and [0011]), wherein the encoded data items including redundant data (i.e. redundant encoded data, [0015], [0019]-[0020] and [0064]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teachings of Keating et al. with Geng because Keating et al. teaches encoding encoded data items such that they include redundant data ([0015], [0019]-[0020] and [0064]), thereby increasing the reliability of signal detection.

Regarding claim 2, Geng and Keating et al. teach the limitations of claim 1 as indicated above. Further, Geng teaches encoding the data (see “simple and elegant way to encode”, column 4 lines 52-56; see also encodes, column 7 lines 34-38).

Geng differs from the claimed invention in that it does not explicitly teach the encoded projection data to contain redundant encoded projection data. Keating et al. teaches an apparatus for embedding data in an information signal comprising an encoding processor (Abstract, [0001] and [0011]), wherein the encoded data items including redundant data (i.e. redundant encoded data, [0015], [0019]-[0020] and [0064]).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teachings of Keating et al. with Geng because Keating et al. teaches encoding encoded data items such that they include redundant data ([0015], [0019]-[0020] and [0064]), thereby increasing the reliability of signal detection.

Regarding claim 3, Geng and Keating et al. teach the limitations of claim 1 as indicated above. Further, Geng teaches:

Device as claimed in claim 1, characterized in that, Epipolar lines (16, 17) pass through a plurality of marks of the pattern (4) (see epipolar line, column 8 lines 20-48 and Fig. 5).

Regarding claim 7, Geng and Keating et al. teach the limitations of claim 2 as indicated above. Further, Geng teaches:

Device as claimed in claim 2, characterized in that, Epipolar lines (16, 17) pass through a plurality of marks of the pattern (4) (see epipolar line, column 8 lines 20-48 and Fig. 5).

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Geng in US Patent 6,028,672 as applied to claim 1 above, and further in view of Furukawa in US Publication 2002/0061132.

Regarding claim 4, Geng teaches the limitations of claim 1 as indicated above. Geng differs from the claimed invention in that it does not explicitly teach restricting the search for corresponding image points to problem areas in which an evaluation of the patten images only produce an erroneous result.

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Furukawa teaches in a conventional method “the range in which the search is moved is limited to the direction of epipolar lines in the image for alleviating processing...The direction of epipolar lines is usually different from the direction of scan lines in the image, but coordinate transformation is performed, whereby the direction of epipolar lines can be made to match with the direction of scan lines” ([0007]-[0008]) and a “data correcting means for correcting erroneous data to be corrected” ([0018], [0021], [0028]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teachings of Furukawa with Geng because Furukawa teaches a stereo image processing apparatus and a stereo image processing method by which sufficiently accurate three-dimensional data can be obtained from satellite stereo images and aerial stereo images with no intervention by operators (Abstract, [0001] and [0016]), thereby reducing operator errors and improving the accuracy of the system.

9. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geng in US Patent 6,028,672 and Keating et al. 2002/0122566 as applied to claims 3 and 7 above, and further in view of Furukawa in US Publication 2002/0061132.

Regarding claim 8, Geng and Keating et al. teach the limitations of claim 7 as indicated above. Geng and Keating et al. differ from the claimed invention in that they do not explicitly teach restricting the search for corresponding image points to problem areas in which an evaluation of the pattern images only produce an erroneous result.

Furukawa teaches in a conventional method “the range in which the search is moved is limited to the direction of epipolar lines in the image for alleviating processing...The direction of epipolar lines is usually different from the direction of scan lines in the image, but coordinate transformation is performed, whereby the direction of epipolar lines can be made to match with the direction of scan lines” ([0007]-[0008]) and a “data correcting means for correcting erroneous data to be corrected” ([0018], [0021], [0028]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teachings of Furukawa with Geng and Keating et al. because Furukawa teaches a stereo image processing apparatus and a stereo image processing method by which sufficiently accurate three-dimensional data can be obtained from satellite stereo images and aerial stereo images with no intervention by operators (Abstract, [0001] and [0016]), thereby reducing operator errors and improving the accuracy of the system.

Regarding claim 9, Geng and Keating et al. teach the limitations of claim 3 as indicated above. Geng and Keating et al. differ from the claimed invention in that they do not explicitly teach restricting the search for corresponding image points to problem areas in which an evaluation of the patten images only produce an erroneous result.

Furukawa teaches in a conventional method “the range in which the search is moved is limited to the direction of epipolar lines in the image for alleviating processing...The direction of epipolar lines is usually different from the direction of scan lines in the image, but coordinate transformation is performed, whereby the direction of

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epipolar lines can be made to match with the direction of scan lines” ([0007]-[0008]) and a “data correcting means for correcting erroneous data to be corrected” ([0018], [0021], [0028]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teachings of Furukawa with Geng and Keating et al. because Furukawa teaches a stereo image processing apparatus and a stereo image processing method by which sufficiently accurate three-dimensional data can be obtained from satellite stereo images and aerial stereo images with no intervention by operators (Abstract, [0001] and [0016]), thereby reducing operator errors and improving the accuracy of the system.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Stolfi in NPL “Oriented projective geometry” teaches “Oriented projective geometry is a model for geometric computation that combines the elegance of classical projective geometry with the ability to talk about oriented lines and planes, signed angles, line segments, convex figures, and many other concepts that cannot be defined within the classical version. Classical projective geometry is the implicit framework of many geometric computations, since it underlies the well-known homogeneous coordinate representation. It is argued here that oriented projective geometry — and its analytic model, based on signed homogeneous coordinates — provide a better foundation for computational geometry than their classical counterparts. The differences

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between the classical and oriented versions are largely confined to the mathematical formalism and its interpretation. Computationally, the changes are minimal and do not increase the cost and complexity of geometric algorithms. Geometric algorithms that use homogeneous coordinates can be easily converted to the oriented framework at little cost. The necessary changes are largely a matter of paying attention to the order of operands and to the signs of coordinates, which are frequently ignored or left unspecified in the classical framework” (Abstract).

Horn in NPL “Relative orientation revisited” teaches “Relative orientation is the recovery of the position and orientation of one imaging system relative to another from correspondences among five or more ray pairs. It is one of four core problems in photogrammetry and is of central importance in binocular stereo as well as in long-range motion vision. While five ray correspondences are sufficient to yield a finite number of solutions, more than five correspondences are used in practice to ensure an accurate solution with least-squares methods. Most iterative schemes for minimizing the sum of the squares of weighted errors requires a good guess as a starting value.” (Abstract.)

Doemens et al. in US Publication 2005/0068544 teaches “A cost-effective panoramic scanner provides for the three-dimensional detection of objects, and in particular for the detection of ear impressions. For this purpose, a pattern is projected onto an object to be detected via a projector that generates an object image via a camera, the object image containing images of markings that enable an unambiguous assignment of the position of the object with respect to the projector and the camera.

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Since an exact synchronization of the rotary movement of the object with the recording of the object images is not necessary by virtue of the markings, the precision of the mechanism used is relatively nonstringent” (Abstract, [0012]-[0026] and Fig. 1).

Robbert et al. in US Publication 2001/0038705 teaches “A scanning system includes a hand-held scanning device that generates two-dimensional images of a pattern reflected off an object. The system also includes a memory and processing unit. The memory stores a calibration table for the scanner and received scanned bitmap images. The processing unit generates three-dimensional information as to a scanned object.

The scanning can be performed without knowledge or even precise control of the position of the object relative to the scanner. Random movement of the object during scanning is also possible. For example, the scanner is simply swept over the surface of the object by hand. Three-dimensional information of the object is obtained from the captured images using a calibration table for the scanner. A method of calibration of the scanner in X, Y and Z directions is also described. The scanner can be used for a variety of purposes, including medical and industrial purposes. The illustrated embodiment is in-vivo scanning of human teeth for purposes of orthodontic treatment planning and diagnosis” (Abstract).

Kerekes in US Publication 2002/0104973 teaches “A closed loop selective deposition modeling apparatus having a surface scanning system for actively monitoring the surface height of a layer of a three-dimensional object as it is being built by selectively dispensing a build material. The surface scanning system directs a beam of

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energy on the surface of the object that establishes an illumination zone which emits scattered light, and has a detector which senses the scattered light and produces a response indicative of the surface condition of the object. The response is processed to establish a plurality of height data signals that are further processed to produce feedback data. The feedback data is then utilized to selectively dispense the build material to desired locations on the surface of the object to therein dimensionally normalize the layer of the object being formed” (Abstract and Fig. 1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mi'schita' Henson whose telephone number is (571) 270-3944. The examiner can normally be reached on Monday - Thursday 7:30 a.m. - 4:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eliseo Ramos-Feliciano can be reached on (571) 272-7925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

05/04/09
/Mi'schita' Henson/
Examiner, Art Unit 2857

/Eliseo Ramos-Feliciano/
Supervisory Patent Examiner, Art Unit 2857